## § 121.53 Materials, construction, and repairs of boilers and machinery.

Materials used and the methods employed in the construction and repairs of boilers and machinery, and the design of boilers and machinery, shall be in accordance with the marine engineering regulations and material specifications of the U.S. Coast Guard, or the rules for building and classing steel vessels of the American Bureau of Shipping, or other recognized classification society, unless otherwise provided in this part.

## §121.54 Preparation of boilers for inspection.

It shall be the duty of the chief engineer to have the boilers which are to be inspected filled with water, safety valves secured by clamps or gags, tubes swept, back connections and furnaces cleaned out, and the water in boilers at a temperature of not more than  $180^{\circ}$  F. for watertube boilers and not more than  $100^{\circ}$  F. for fire-tube boilers.

## §121.55 Tests and inspections of new boilers.

All boiler tests and inspections of new boilers shall conform to the standards of the U.S. Coast Guard "Marine Engineering Regulations" (46 CFR, Subchapter F).

# §121.56 Tests and inspections of boilers and main steam pipes in service.

All tests and inspections of boilers and main steam pipes in service shall conform to the standards of the U.S. Coast Guard "Marine Engineering Regulations" (46 CFR, Subchapter F).

## §121.57 Inspection of mountings and attachments.

All valves on boilers shall be opened up every 4 years at the time of annual inspection or the next regular drydocking period thereafter. All valves shall be removed from the boiler at least once every 8 years to determine the condition of the stud bolts connecting the valves to the boiler. These examinations may be made at intermediate periods if there is any evidence to indicate that defects have started or excessive corrosion exists.

#### §121.58 Safety valves.

- (a) At the annual inspection of each boiler, the marine safety inspector shall check the setting of each boiler safety valve and make any adjustments that may be necessary to keep the boiler within the maximum allowable pressure. After adjusting the boiler safety valves, the marine safety inspector shall seal each safety valve separately with the official seal of the Marine Safety Unit.
- (b) Each chief engineer, upon taking charge of the power plant of a vessel, shall examine all safety valves and if any seals are broken, or there is any evidence that valves have been tampered with, he shall report same in writing to the Marine Safety Unit. If at any time it is necessary to break the seal on a safety valve for any purpose, the chief engineer shall advise the Marine Safety Unit in writing, giving the reason for breaking the seal and requesting the valve be examined, adjusted, and resealed.

[54 FR 37328, Sept. 8, 1989]

### §121.59 Fusible plugs.

The inspector shall examine fusible plugs when inspecting the boilers. The number of such plugs inserted in each boiler, the manufacturer's name, and the heat number shall be included in the boiler inspection report.

## §121.60 Water columns, test cocks, and water gages.

Water columns, test cocks, and water gages shall be carefully examined, tested and checked by the inspector at each inspection.

#### §121.61 Steam gages.

All steam gages connected to boilers or main steam lines shall be carefully checked for accuracy at each inspection.

#### §121.62 Safety valves or relief valves on reduced pressure lines, evaporators, etc.

Inspectors shall give the same attention and inspection to safety valves or relief valves installed on reduced pressure lines, evaporators, superheaters, feed water heaters, etc., as to the safety valves installed on the main boilers.